# CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD SAN DIEGO REGION

# **FACT SHEET**

# ORDER NO. R9-2003-0005 NPDES PERMIT NO. CA0109134

# WASTE DISCHARGE REQUIREMENTS

### **FOR**

### NATIONAL STEEL AND SHIPBUILDING COMPANY

### **SAN DIEGO COUNTY**

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WASTE DISCHARGE REQUIREMENTS FOR

### NATIONAL STEEL & SHIPBUILDING COMPANY

### SAN DIEGO COUNTY

### A. CONTACT INFORMATION

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### B. BACKGROUND

National Steel & Shipbuilding Company (NASSCO) is an existing full service ship construction, modification, repair, and maintenance facility located on the eastern waterfront of central San Diego Bay in San Diego, California. Operations at NASSCO

generate or have the potential to generate discharges of waste to San Diego Bay. The waste discharges may cause a short-term loss of designated beneficial uses of the receiving water. The discharges may include industrial process water and/or storm water contaminated with abrasive blast material, paint, oils, lubricants, fuels, or solvents.

NASSCO is currently regulated by Order No. 97-36, NPDES Permit No. CAG039001, a general permit (General Shipyard Permit) that regulates discharges from ship construction, modification, repair, and maintenance facilities and activities in the San Diego Region. Other shipyards regulated by Order No. 97-36 include Southwest Marine, Inc. (SWM), and Campbell Industries. Order No. 97-36 expired on October 15, 2002 but the requirements remain in effect until a new NPDES permit is adopted by the Regional Board.

On April 16, 2002 NASSCO submitted a *Report of Waste Discharge* (RWD) for a *National Pollutant Discharge Elimination System* (NPDES) Permit. Tentative Order No. R9-2003-0005 is an individual NPDES permit that is specifically written for the operational, structural, and discharges conditions at the NASSCO facility. The tentative Order incorporates the numerous operational and structures changes in the facility that have taken place since adoption of the General Shipyard Permit in 1997. NASSCO is a major NPDES discharger.

### C. FACILITY DESCRIPTION

NASSCO provides a full range of ship construction, conversion, and repair capabilities to the U.S. Navy as well as commercial customers. NASSCO, a subsidiary of General Dynamics Corporation, is located on approximately 126 acres of tidelands property leased from the San Diego Unified Port District (SDUPD) on the eastern waterfront of central San Diego Bay at 28<sup>th</sup> Street and Harbor Drive. The land portion of the lease is approximately 79 acres. It includes approximately 37 acres of administrative offices, production shops, and warehouses, 9 acres of concrete platens used for steel fabrication, a graving dock, two shipbuilding ways, and 12 berths on piers or land to accommodate the berthing of ships. Improvements to the 37 acres of water area include a floating drydock. A sheet pile bulkhead and a wall along most of the waterfront separates the land and the adjacent receiving waters of San Diego Bay. The NASSCO *Site map* and *Facilities Plot Plan* are in *Attachment A* to tentative Order No. R9-2003-0005.

### 1. Graving Dock

The graving dock (identified as the *building dock* in the facility plot plan) is isolated from San Diego Bay by a caisson gate. The caisson gate is removed after the dock is flooded to allow launching of the ship or other vessel. The caisson gate is moved by de-ballasting the salt-water tanks located inside the gate. Any leakage from the caisson gate or from the graving dock floor or walls is isolated in a sump and discharged to the San Diego Metropolitan Sanitary Sewer System (SDMSSS).

The *hydrostatic relief water*, that is, water pumped from the ground to prevent seepage or buckling of the floor or walls of the graving dock, is collected in a sump and discharged to San Diego Bay.

All industrial storm water at the graving dock is captured and discharged to the SDMSSS. Industrial process water is collected in a sump and pumped into a tank for disposal to the SDMSSS or to the NASSCO wastewater treatment plant for treatment prior to disposal to the SDMSSS. Waste generated at the graving dock includes spent abrasive, paint, rust, petroleum products, marine growth, and general refuse.

### 2. Shipbuilding Ways

There are two shipbuilding ways (Ways 3 and Ways 4) located north of the graving dock. A ways is an inclined ramp used to support a ship or vessel while under construction. The ship is constructed on a cradle, which is resting on a greased ramp. To launch the ship, the ship is released and slides down the ramp and into the Bay. The ways are isolated from the bay waters by a gate that is removed after the ways are flooded to allow for the launch of ships or other structures. The ground water at the ways is also dewatered (hydrostatic relief) to prevent leakage and buckling. The hydrostatic relief water is collected in a sump and discharged to San Diego Bay. Gate and wall leakage is isolated in a sump and pumped to a holding tank for discharge to the SDMSSS. Industrial process water is pumped into a tank for disposal to SDMSSS. Wastes generated at the ways include spent abrasive, paint, petroleum products, and general refuse.

## 3. Floating Drydock

The floating drydock is used to repair ships or other vessels. Ship launching and recovery is accomplished by sinking and floating the drydock by flooding or deballasting the ballast tanks. Industrial process water at the drydock is collected in a sump and pumped into a tank for disposal to the SDMSSS or to the NASSCO wastewater treatment plant for treatment prior to disposal to the SDMSSS. Wastes generated during repair activities include spent abrasive, paint, rust, petroleum products, marine growth, and general refuse.

### 4. Piers and Other Facilities

The facility has five piers, which provide 12 berthing spaces. Repairs, maintenance, or construction work may be conducted on the berthed ships. Other shore facilities such as electrical shops, sheet metal shops, carpenter shops, paint shops, etc., exist to support the construction, conversion, maintenance, and repair of ships. Wastes generated and transported across the piers include spent abrasives, paint, petroleum products, sanitary waste, and general refuse.

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### D. DISCHARGE SOURCES AND WASTE CHARACTERIZATION

## 1. Point Source Discharges

Currently, all of NASSCO's industrial process water discharges that are associated with ship construction, modification, repair, and maintenance activities are diverted to the SDMSSS. The City of San Diego's Industrial User Discharge Permit (IUD Permit No. 11-0051), which expires on September 30, 2004, authorizes NASSCO to discharge a maximum of 28,000 gallons per day of industrial waste water to the SDMSSS. The discharge includes process waste from hydro blasting, tank cleaning, sewage disposal, oily bilge water, contaminated ballast water, floating drydock sump water, and clarified water from oil/water separators.

This Order prohibits the discharge of process wastes to San Diego Bay. According to the City of San Diego's Industrial Wastewater Control Program staff, NASSCO has been in compliance with its industrial wastewater discharge to the SDMSSSS since 1998.

Several industrial discharges to San Diego Bay are regulated by Order No. R9-2003-0005. These are discharges from several fire protection systems; graving dock caisson and floating drydock deballast; graving dock, ways 3, and ways 4 floodwater; and hydrostatic relief water from the graving dock, ways 3, and ways 4. The location and average flow for these discharges are listed in *Table 1*. *Latitude and Longitude of Discharge Points*.

**Table 1.** Latitude and Longitude of Discharge Points.

Discharge Point	Average Flow MGD/GPM*	Latitude (N)	Longitude (W)
Fire Protection Water at Berth II	250 GPM	32° 41.183'	117°08.28'
(FP-1)			
Fire Protection Water at Berth V	250 GPM	32° 41.200'	117°08.18'
(FP-2)			
Fire Protection Water at Berth X	500 GPM	32° 41.350'	117°08.45'
(FP-3)			
Fire Protection Water at Ways 3	450 GPM	32° 41.383'	117°08.28'
(FP-4)			
Fire Protection Water at Floating	2,340 GPM	32° 41.233'	117°08.45'
Drydock (FP-5)			
Hydrostatic Relief at Graving Dock	0.148 MGD	32°41.36'	117°08.26'
(HR-1)			
Hydrostatic Relief at Ways 3	0.216 MGD	32°41.38'	117°08.28'
(HR-2)			
Hydrostatic Relief at Ways 4	0.216 MGD	32°41.40'	117°08.30'
(HR-3)			
Floating Dry-dock De-ballast	76,000 GPM	32°41.37'	117°08.35'

Discharge Point	Average Flow MGD/GPM*	Latitude (N)	Longitude (W)
(M-1)			
Graving Dock Flood Dewatering (M-2)	0.018 GPM	32°41.27'	117°08.27'
Ways 3 Flood Dewatering (M-3)	5,810 GPM	32° 41.32'	117°08.28'
Ways 4 Flood Dewatering (M-4)	5,810 GPM	32° 41.33'	117°08.30'
Hydrostatic Testing Water-New Vessels (M-5)	0.300 MGD	32° 41.20'	117°08.18'
Graving Dock Gate De-ballast (M-6)	500 GPM	32°41.27'	117°08.27'
Pipe and Tank Hydrostatic Test Water (M-8)	0.040 MGD	32°41.35'	117°08.45'

MGD = million gallons per day and GPM = gallons per minute

The pollutants of concern for the above discharges include conventional pollutants and metals, particularly copper, nickel, and zinc. Monitoring and Reporting Program No. R9-2003-0005 requires NASSCO to monitor monthly for copper, nickel, and zinc, (for a maximum of 24 months) and annually for all other pollutants.

Several discharges regulated by the General Shipyard Permit are currently being diverted to the SDMSSS. These discharges are:

- 1. saltbox water;
- 2. steam condensate;
- 3. compressor and condenser non-contact cooling water;
- 4. shipbuilding ways gate and wall leakage;
- 5. graving dock caisson gate and wall leakage water; and
- 6. floating drydock sump water.

NASSCO shall notify the Regional Board in accordance with *Reporting Requirements F.2* of Order No. R9-2003-0005 prior to resuming the above discharges to San Diego Bay. Pursuant to *Section 2.2 of the Implementation Policy*, additional monitoring will be required for priority pollutants as specified in the Implementation Policy for this Regional Board to conduct a Reasonable Potential Analysis (RPA).

#### 2. INDUSTRIAL STORM WATER DISCHARGES

NASSCO operates and maintains a Storm Water Diversion System (SWDS). The SWDS is designed to capture all storm water runoff from all industrial areas. NASSCO developed the SWDS to eliminate the discharge of industrial storm water. NASSCO's storm water retention capacity exceeds 33,858,000 gallons, more than enough capacity to capture a 100-year storm event (approximately 3.5 inches of rain in 24 hours).

The first flush of industrial storm water runoff, which is defined as 1.00 inch in *Attachment E* to Order No. R9-2003-0005, is presumed to contain the highest concentration of pollutants. As a storm event continues, the runoff may contain lower concentrations of contaminants. Currently NASSCO captures all industrial storm water runoff and discharges the runoff to the SDMSSS. A limit of 400 GPM of industrial storm water may be discharged to the Metropolitan Sanitary Sewer System pursuant to the IUD Permit. If a large storm event exceeds the storm water holding capacity of its storm water holding tanks (192,000 gallons), graving dock (33,000,000 gallons), steel yard (538,000 gallons), and floating drydock (128,000 gallons), NASSCO will discharge the industrial storm water to San Diego Bay through its system of nine outfalls.

# E. BASIS FOR WASTE DISCHARGE REQUIREMENTS AND EFFLUENT LIMITATIONS

Section 402 of the federal Clean Water Act (CWA) gives the USEPA the authority to issue NPDES permits for discharges into navigable waters and to prescribe conditions for such permits necessary to carry out the provisions of the CWA. In California, the USEPA has delegated this authority to the State of California.

Section 402 (a)(1) of the CWA authorizes the issuance of best available technology economically achievable (BAT) limitations in NPDES permits using best professional judgment (BPJ). Effluent limitations for the pollutants specified in Order No. R9-2003-0005 are based on the use of BAT for the removal of pollutants. Effluent limits for point source discharges (except for storm water) are specified for oil and grease, settleable solids, turbidity, pH, and temperature.

### 1. NPDES Regulation for Best Management Practices

According to 40 CFR 122.44(k) of the NPDES regulations, Best Management Practices (BMPs) may be included as permit conditions to control or abate the discharge of pollutants when:

- Authorized under Section 304(e) of the CWA for the control of toxic pollutants and hazardous substances from ancillary industrial activities;
- Authorized under Section 402(p) of the CWA for control of storm water discharges;
- Numeric effluent limitations are infeasible; or
- The practices are reasonably necessary to achieve effluent limitations and standards or to carry out the purpose and intent of the CWA.

The implementation of BMPs for the discharge of industrial wastes associated with ship construction, repair and maintenance activities (as described in *Section D and Table No. 1* of this Fact Sheet) are appropriate. A BMP plan that emphasizes pollution preventive

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measures should be an effective method to abate the potential for the discharge of pollutants and waste from the facility. Order No. R9-2003-0005 requires NASSCO to develop, implement, and maintain a BMP plan (*Order No. R9-2003-0005*, *Attachment B*).

#### 2. Basin Plan

The Comprehensive Water Quality Control Plan, San Diego Basin (9) (hereinafter Basin Plan) was adopted by this Regional Board on September 8, 1994 and subsequently approved by the State Water Resources Control Board (SWRCB) on December 13, 1994. Subsequent revisions to the Basin Plan have also been adopted by this Regional Board and approved by the SWRCB. The Basin Plan designates beneficial uses, narrative and numerical water quality objectives, and prohibitions that are applicable to the discharges regulated under this Order.

## i. Beneficial Uses

The Basin Plan (p. 2-47, *Table 2-3. Beneficial Uses of Coastal Waters*) established the following beneficial uses for the waters of San Diego Bay:

- a. Industrial Service Supply;
- b. Navigation;
- c. Contact Water Recreation;
- d. Non-contact Water Recreation:
- e. Commercial and Sport Fishing;
- f. Preservation of Biological Habitats of Special Significance;
- g. Estuarine Habitat;
- h. Wildlife Habitat:
- i. Rare, Threatened, or Endangered Species;
- j. Marine Habitat;
- k. Migration of Aquatic Organisms; and
- 1. Shellfish Harvesting.

### ii. Toxicity

The Basin Plan includes the following narrative water quality objective for toxicity:

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All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board.

The survival of aquatic life in surface waters subjected to a waste discharge or other controllable water quality factors, shall not be less than that for the same water body in areas unaffected by the waste discharge or, when necessary, for other control water that is consistent with requirements specified in U.S. EPA, State Water Resources Control Board or other protocol authorized by the Regional Board. As a minimum, compliance with this objective as stated in the previous sentence shall be evaluated with a 96-hour acute bioassay.

In addition, effluent limits based upon acute bioassays of effluents will be prescribed where appropriate, additional numerical receiving water objectives for specific toxicants will be established as sufficient data become available, and source control of toxic substances will be encouraged.

### Point Source Discharges and Toxicity

Toxicity testing on fire protection water, hydrostatic relief water, and miscellaneous low volume discharges was required under the General Shipyard Permit and will also be required by Order R9-2003-0005. Toxicity survival rates for these discharges have had a percent survival ranging between 0% and 100%. The discharges were never in violation of the acute toxicity requirement because the "90% survival rates" have not been below the "50% of the time" specification. The monitoring frequency for toxicity will remain as an annual requirement.

## • Storm Water Discharges and Toxicity

Historical toxicity monitoring results for discharges of industrial storm water from NASSCO have had a percent survival rate range of 0% to 85%. The acute toxicity limit specified in Order No. R9-2003-0005 is applicable to all industrial storm water discharges. NASSCO's ability to capture all storm water runoff eliminates a source of toxic pollutants to San Diego Bay.

On September 11, 2002, the Regional Board adopted an NPDES permit (Order No. R9-2002-0002) for the U.S. Naval Base at Point Loma (NBPL), in San Diego. Order No. R9-2002-0002 directed the U.S. Navy to conduct a four-year study of the toxicity in its industrial storm water discharges from all areas of the Naval Submarine Base (SUBASE) in the NBPL complex. The study would recommend a scientifically valid survival rate for acute exposure to discharges of storm water from industrial areas at SUBASE. The study may include a Toxicity Identification Evaluation (TIE), or a Toxicity Reduction Evaluation (TRE). Since the industrial activities at the SUBASE are similar to those conducted at NASSCO, the Regional Board has no objection to NASSCO participating in this study. Until an alternate acute toxicity limit for storm water is developed, validated, and presented for Regional Board's review and approval, the discharge specification "90% survival, 50% of the time, and not less than 70% survival,

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10% of the time" in Order No. R9-2003-0005 shall continue to be applicable for any industrial storm water discharged from NASSCO.

## 3. Enclosed Bays and Estuaries Policy

The State Water Resources Control Board (State Board) adopted a *Water Quality Control Policy for Enclosed Bays and Estuaries of California* (Bays and Estuaries Policy) on May 16, 1974. The Bays and Estuaries Policy establishes principals for the management of water quality, quality requirements for waste discharges, discharge prohibitions, and general provisions to prevent water quality degradation and to protect the beneficial uses of waters of enclosed bays and estuaries. These principals, requirements, prohibitions, and provisions have been incorporated into Order No. R9-2003-0005.

The Bays and Estuaries Policy contains the following principle for management of water quality in enclosed bays and estuaries, which includes San Diego Bay:

The discharge of municipal wastewaters and industrial process waters (exclusive of cooling water discharges) to enclosed bays and estuaries shall be phased out at the earliest practicable date. Exceptions to this provision may be granted by a Regional Board only when the Regional Board finds that the wastewater in question would consistently be treated and discharged in such a manner that it would enhance the quality of receiving waters above that which would occur in the absence of the discharge. For the purpose of this policy, treated ballast waters and innocuous non-municipal wastewater such as clear brines, wash water, and pool drains are not necessarily considered industrial process wastes, and may be allowed by Regional Boards under discharge requirements that provide protection to the beneficial uses of the receiving water.

The Bays and Estuaries Policy also prohibits the discharge or by-passing of untreated wastes. This Order prohibits the discharge and bypassing of untreated waste except for non-contact fire protection system water, hydrostatic relief water, and flood water. For the purpose of the *Bays and Estuaries Policy* and Order No. R9-2003-0005, the discharges of fire protection water; hydrostatic relief water, floating drydock deballasting; floodwater dewatering; hydrostatic testing water-new vessels; graving dock caisson deballasting and pipe and tank hydrostatic test water; and the waste discharges conditionally regulated (saltbox water; steam condensate; compressor and condensor non-contact cooling water; shipbuilding ways gate and wall leakage; graving dock sump water; and graving dock sump pump test water) will be considered innocuous nonmunicipal wastewaters and, as such, will not be considered industrial process wastes.

The Bay and Estuaries Policy also contains the following principle for management of water quality in enclosed bays and estuaries, which includes San Diego Bay.

The following policies apply to all of California's enclosed bays and estuaries:

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- Persistent or cumulative toxic substances shall be removed from the waste to the maximum extent practicable through source control or adequate treatment prior to discharge.
- Bay or estuarine outfall and diffuser systems shall be designed to achieve the most rapid initial dilution practicable to minimize concentrations of substances not removed by source control or treatment.
- Wastes shall not be discharged into or adjacent to areas where the protection of beneficial uses requires spatial separation from waste fields.
- Waste discharges shall not cause a blockage of zones of passage required for the migration of anadromous fish.
- Nonpoint sources of pollutants shall be controlled to the maximum extent practicable.

The terms and conditions of Order No. R9-2003-0005 are consistent with the above policies.

## 4. California Toxics Rule and Implementation Policy

The U.S. EPA promulgated the final California Toxic Rule (CTR) on May 18, 2000, as required by Section 303(c)(2)(B) of the federal Clean Water Act. The CTR regulations, codified in 40 CFR 131, establish water quality standards for inland surface waters and bays and estuaries. The water quality criteria established in the CTR is legally applicable in the State of California for inland surface waters, and enclosed bays and estuaries for all purposes and programs under the Clean Water Act.

On March 2, 2000, the State Board, in Resolution No. 2000-15, adopted a *Policy for Implementation of Toxic Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California* (Implementation Policy). The Implementation Policy implements the provisions promulgated by the U.S. Environmental Protection Agency in the California Toxic Rule (CTR) and establishes the following:

- a) implementation provisions for priority pollutant criteria promulgated by the USEPA through the National Toxic Rule (NTR) and the CTR, and for priority pollutant objectives established in the Basin Plan;
- b) monitoring requirements for 2,3,7,8-TCDD (tetrachlorodibenzo-p-dioxin) equivalents; and

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c) chronic toxicity control provisions.

The above provisions are only applicable to non-storm water discharges. Pursuant to footnote 1 of the Implementation Policy, the Implementation Policy does not apply to the regulation of storm water discharges. Therefore, the Implementation Policy is not used to regulate the industrial storm water discharges at NASSCO. The only non-storm water discharges from NASSCO to San Diego Bay are fire protection water, hydrostatic relief water, non-contact cooling water, graving dock caisson ballast tank, flood water dewatering, and floating drydock de-ballast water, and miscellaneous low volume discharges. Discharges of flood water dewatering were not analyzed for priority pollutants. The tentative Order requires monitoring of the flood water discharges. If monitoring data indicates the discharges of flood water are a source of pollutants, the tentative order may be modified or revised. If a significant or material change occurs in the discharges (i.e. chemical concentrations, physical properties, location, volume, or frequency), the potential impact to beneficial uses may change or cause a violation of Order No. R9-2003-0005. Any change in either the nature or volume of the discharges can be readily identified and evaluated through the monitoring requirements specified in Monitoring and Reporting Program No. R9-2003-0005.

On April 15, 2002 NASSCO submitted analytical results of samples taken from fire protection water, hydrostatic relief water, and San Diego Bay receiving water. The sampling was conducted on March 26, 2002 and was analyzed by Del Mar Analytical Laboratory for Toxicity Equivalency Factors for 2,3,7,8-TCDD and by Weck Laboratories, Inc. for the 40 CFR 131.38 Priority Pollutants.

Pursuant to Section 1.3 of the Implementation Policy, a reasonable potential analysis (RPA) of data is required to determine which priority pollutants would require effluent limitations. All priority pollutants except antimony, arsenic, cadmium, chromium (total), copper, lead, nickel, selenium, and zinc were at non-detectable levels in both effluent and receiving water samples. Copper, nickel, and zinc were found at high enough levels to require additional monitoring.

Regional Board staff conducted an RPA for all priority pollutants, using the SWRCB's California Permit Writer and Training Tool (CPWTT) computer program. Based on the results of this analysis, Regional Board staff concluded that effluent limits will not be required at this time for any of the metals, volatiles, semi-volatiles, pesticides, polychlorinated biphenyls (PCBs), and 2,3,7,8-TCDD (dioxin), listed in the CTR.

However, the discharger shall conduct additional monitoring for copper, nickel, and zinc. The additional monitoring is necessary to conduct an RPA for the metals. Pursuant to Section 2.2.2 (Interim Requirements for Providing Data) of the Implementation Policy, Order No. R9-2003-0005 requires the discharger to conduct additional effluent and ambient water sampling for copper, nickel, and zinc for the discharges of fire protection water, hydrostatic relief water at ways 3 and 4, and the graving dock.

Monthly sampling for copper, nickel and zinc will be required at the effluent discharge point and the receiving water for a maximum two-year period. Once adequate data has been submitted, Regional Board staff will conduct an RPA to determine if effluent limits

are needed for copper, nickel, or zinc. If the RPA identifies a need for effluent limits, staff will calculate limits using procedures specified in Section 1.4 of the Implementation Policy. Pursuant to Section 1.4.4 of the Implementation Policy, staff will also determine if intake water credits will be considered during establishment of these effluent limits. Order No. R9-2003-0005 may be re-opened at a later date to incorporate the results of this analysis.

Section 3 of the Implementation Policy requires effluent monitoring for 17 congeners of chlorinated dibenzodioxins (2,3,7,8-CDDs) and chlorinated dibenzofurans (2,3,7,8-CDFs) for industrial dischargers. These congeners and corresponding toxic equivalency factors (TEFs) are listed in Table 4 of the Implementation Policy. The purpose of the monitoring is to assess the presence and amounts of the congeners being discharged to inland surface waters, enclosed bays, and estuaries for the development of a strategy to control these chemicals in a future multi-media approach.

Pursuant to Section 3 of the Implementation Policy and prior to October 1, 2003 the discharger will be required to monitor its effluent for the presence of the 17 congeners once during the dry season (June through September). Wet season congener monitoring was submitted on April 15, 2002. The discharger will be required to multiply each measured or estimated congener concentration by its respective TEF value and report the sum of these values. The provisions of this monitoring requirement are incorporated into Monitoring and Reporting Program No. R9-2003-0005.

### 5. Ocean Plan

The SWRCB adopted a revised Water Quality Control Plan for Ocean Waters of California (Ocean Plan) on December 3, 2001. The Ocean Plan establishes water quality objectives (for bacteriological, physical, chemical, and biological characteristics, and for radioactivity), general requirements for management of waste discharged to the ocean, quality requirements for waste discharges (effluent quality requirements), discharge prohibitions, and general provisions.

Although the Ocean Plan is not applicable to enclosed bays, such as San Diego Bay, the salinity and beneficial uses of San Diego Bay are similar to those of the ocean waters of the State. Therefore, in order to protect the beneficial uses of San Diego Bay, this Order uses the Ocean Plan as a reference for developing discharge specifications, receiving water prohibitions, and narrative limitations and to supplement the provisions contained in the California Toxics Rule, the Implementation Policy, and the Enclosed Bays and Estuaries Policy.

Order No. R9-2003-0005 requires all point source discharges, except storm water, to comply with the grease and oil, settleable solids, turbidity, and pH effluent limits listed in *Table A* of the Ocean Plan.

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#### 6. Thermal Plan

The SWRCB adopted a revised Water Quality Control Plan for Control of Temperature in the Coastal and Interstate Waters and Enclosed Bays and Estuaries of California (Thermal Plan) on September 18, 1975. The tentative Order will continue to require the following maximum temperature limit as an effluent limitation:

Not more than  $20^{\circ}$  F greater then natural temperature of receiving waters.

### 7. 303 (d) List and Sediment Monitoring

Section 303(d) of the Clean Water Act requires States to identify waters that do not meet water quality standards after applying technology-based effluent limits. States are required to compile this information in a list and submit the list to USEPA for review and approval. This list is known as the Section 303(d) list of *impaired waters*. As part of this listing process, States are required to prioritize waters or watersheds for development of total maximum daily load (TMDL).

In February 1998, the Regional Board designated 30 acres of the San Diego Bay's eastern shoreline near the Coronado Bridge as an impaired water body and included this area in the Section 303(d) list. The listing was the result of information gathered for the *Chemistry, Toxicity and Benthic Community Conditions in Sediments of the San Diego Bay Region, Final Report*, September 1996 (commonly know as the report for the Bay Protection and Toxic Cleanup Program (BPTCP)). Fourteen acres of San Diego Bay near NASSCO are listed as being impaired for benthic community effects and sediment toxicity.

The General Shipyard Permit established a sediment monitoring program for NASSCO that required the facility to collect annual surficial sediment samples at 18 stations. The sediment monitoring program also required sampling at 3 background reference stations in San Diego Bay. The monitoring included sediment sampling for grain size, trace metals including cadmium, chromium, copper, nickel, silver, mercury, arsenic, lead, and zinc, and tributyltin (TBT), total petroleum hydrocarbons (TPH), polychlorinated biphenysl/triphenyls (PCBs/PCTs), and polyaromatic hydrocarbons (PAHs), and an analysis of paint chips entrained in the sediment. The purpose of the sampling was to monitor changes in the levels of sediment contamination and to use the information for any future cleanups and implementation of waste load allocations for the TMDL program.

Elevated levels of metals, such as copper and zinc, in the San Diego Bay bottom sediment at Southwest Marine, Inc. (SWM) and NASCCO facilities led the Regional Board to issue Resolution No. 2001-03 on February 21, 2001.

The resolution directed the Executive Officer to issue a Water Code Section 13267 letter to SWM and NASSCO requiring each shippard to submit the results of a site-specific

study to develop sediment cleanup levels and identify sediment cleanup alternatives by June 21, 2001. NASSCO is currently conducting Phase 2 of the sampling plan to develop sediment cleanup levels. The cleanup is expected to start in spring of 2003.

Sediment monitoring, as specified in Monitoring and Reporting Program No. R9-2003-0005 will not be required until the sediment cleanup at NASSCO is completed. The MRP No. R9-2003-0005 requires that the first set of samples from the NASSCO sampling stations and reference stations be taken concurrently with the last post-cleanup sampling. This will establish sediment data after the cleanup that can be used to compare the subsequent annual sediment monitoring data submitted thereafter. The sediment data conditions after the cleanup will be used to compare or analyze trends in the concentrations in the sediment.

### 8. Antidegradation Policies

Pursuant to 40 CFR 131.12 and State Board Resolution No. 68-16, "Statement of Policy with Respect to Maintaining High Quality of Waters in California" (collectively "antidegradation policies"), the Regional Board shall ensure that any increase in pollutant loading to a receiving water is consistent with antidegradation policies. Order No. R9-2003-0005 does not authorize any new discharges. Furthermore, effluent concentration and mass emission rate limitations in this Order are the same or more stringent than those in the General Shipyard Permit. Therefore, the requirements of Order No. R9-2003-0005 are consistent with antidegradation policies.

### F. EFFECTIVE AND EXPIRATION DATES

Order No. R9-2003-0005 becomes effective 10 days after its adoption provided the Regional Administrator, USEPA, has no objection. If the Regional Administrator objects to its issuance, this Order shall not become effective until such objection is withdrawn. The expiration date of Order No. R9-2003-0005 is February 5, 2008.

### G. WRITTEN COMMENTS

Interested persons are invited to submit written comments upon these draft waste discharge requirements. Written comments must be submitted either in person or by mail no later than January 23, 2003 to:

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Executive Officer California Regional Water Quality Control Board San Diego Region ATTN: Industrial Compliance Unit 9174 Sky Park Court, Suite 100 San Diego, CA 92123-4340 Oral comments will be received during the hearing on February 5, 2003.

### H. PUBLIC HEARING

In accordance with 40 CFR 124.10, this Regional Board must issue a public notice whenever NPDES permits have been prepared, and that the tentative permits will be brought before the Regional Board at a public hearing. The public notice has been published in The San Diego Union-Tribune newspaper no less than 30 days prior to the scheduled public hearing.

This Regional Board, at a public hearing, will consider the tentative waste discharge requirements on February 5, 2003 beginning at 9:00 a.m. at the following location:

Regional Water Quality Control Board, San Diego Region Board Meeting Room 9174 Sky Park Court, Suite 100 San Diego, CA 92123-4340

### I. REVIEW OF WASTE DISCHARGE REQUIREMENTS

Copies of the waste discharge requirements and other documents (other than those that the Executive Officer maintains as confidential) are available at the Regional Board office for inspection and copying according to the following schedule (except holidays):

Monday and Thursday: 1:30 p.m. to 4:30 p.m. Tuesday and Wednesday: 8:30 a.m. to 11:30 a.m. and

1:30 p.m. to 4:30 p.m.

Friday: 8:30 a.m. to 11:30 a.m.

An electronic copy of the Fact Sheet and tentative Order can be accessed on the Regional Board website at <a href="http://www.swrcb.ca.gov/rwqcb9/">http://www.swrcb.ca.gov/rwqcb9/</a>.

### J. ADDITIONAL INFORMATION

For additional information regarding Order No. R9-2003-0005, interested persons may write to the Regional Board address above, call Mr. Paul J. Richter of the Regional Board staff at (858) 627-3929, or e-mail him at <a href="mailto:richp@rb9.swrcb.ca.gov">richp@rb9.swrcb.ca.gov</a>.

# K. REFERENCES FOR WASTE DISCHARGE REQUIREMENTS

The following documents provide the necessary references for the basis of this NPDES permit:

a. California Code of Regulations, Title 23, Division 3 and 4.

December 16, 2002

- b. Clean Water Act; Sections 208, 301, 302, 303, 304, 306, 307, 402, 403, and 405.
- c. Code of Federal Regulations Part 40, Section 122, 131, and 136.
- d. Order No. 97-36, General NPDES Permit No. CAG039001, Waste Discharge Requirements from Ship Construction, Modification, Repair, and Maintenance Facilities and Activities Located in the San Diego Region (TTWQ/CPLX 1/A).
- e. Report of Waste Discharge, NPDES Permit Renewal Application, National Steel and Shipbuilding Company, April 15, 2002.
- f. SWRCB Policy for Implementation of Toxic Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California (Implementation Policy).
- g. Water Quality Control Plan for Control of Temperature in the Coastal and Interstate Waters and Enclosed Bays and Estuaries of California, September 18, 1975.

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- h. Water Quality Control Plan for Ocean Waters of California, December 3, 2001.
- i. Water Quality Control Plan for the San Diego Basin (9) (Basin Plan), 1994.